FIMER

FIMER introduces a New Era in e-mobility

EVI Solutions

FIMER
company overview

Fimer: solar inverters & e-mobility

FIMER's activity is today mainly focused on design, production and distribution of solar inverters and Electric Vehicles charging stations.

Capacity / year (String Inverter, Central Inv, Storage PCS)	Installed Capacity
11+ GW	**43+ GW**

25.000+

EV charging stations installed

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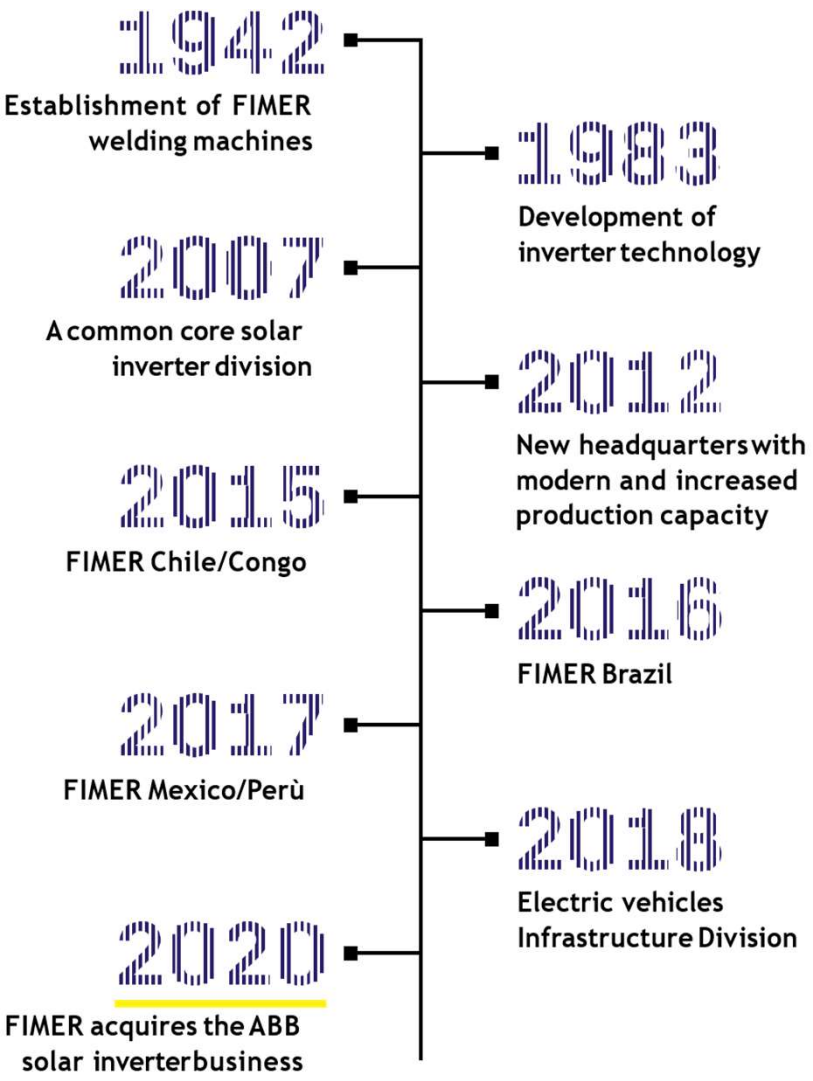
Our brand, our roots, our future

The evolution of our brand reflects a history of growth

In 1942 FIMER started the journey that saw the company developing and become a leader in inverter technology, applied after to Solar and EVI products.

Under the umbrella of our FIMER corporate brand, the newly acquired solar inverter portfolio continues to carry the ABB brand under trademark licenses agreement to ensure a smooth brand transition.

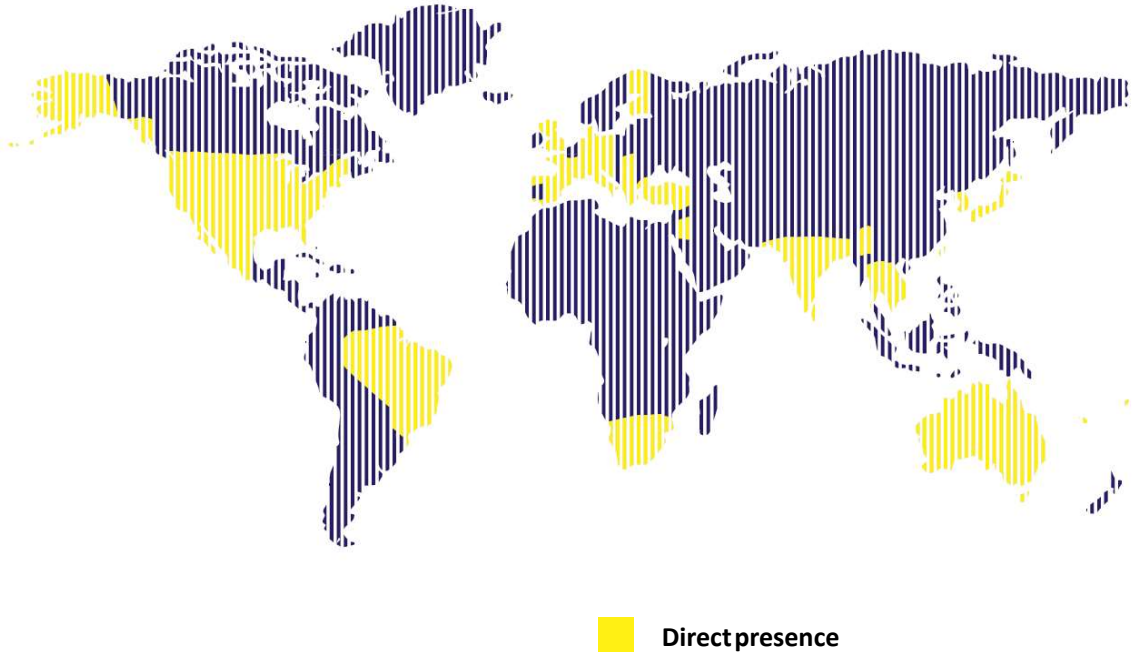


FIMER

Global presence

Operating in over 100 countries, we are close to our customers, taking care to understand and satisfy their needs.

- **Direct presence:** 26 Countries in 5 continents
- **Geographic distribution:** over 100 Countries
- **Employees:** over 1100
- **Global repaircenters:** 12 in 5 continents
- **Production sites:** 3
- **Research centres:** 3
- **Active in EV charging:** since 2017



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Our vision

“FIMER is shaping a new energy model that drives progress and prosperity. As we dare to be brave and embrace change, we transform solar technology.

We’re creating clean, affordable energy which truly benefits our customers and people worldwide.”

Filippo Carzaniga,
Chairman of the Board

Our zero impact headquarters

At FIMER, commitment to sustainability is our mission.

FIMER 2020 is a new chapter towards the achievement of this commitment

- We are working at zero impact headquarter in Vimercate (Italy), acting responsibly, considering environmental respect as our absolute value, not just a market trend.
- Moreover, a 1 MW solar system, highly sustainable materials and the best technologies in the field of geothermal energy have been our practice so far.

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Fimer R&D

Over 200 engineers in 3 R&D centers

Our R&D approach for constant innovation in our international research centers ensures continuous portfolio renewal with cutting-edge technology. FIMER's R&D department designed and manufactured the electronic controller installed on FIMER Solar and EVI solutions.

R&D hubs (2 in Italy and 1 in Finland)

3

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Fimer Production

FIMER's solutions are based on over 70 years of continuous experience and technological advancements in technology.

Standardized, certified and expandable: The production processes applied, and plants at which the inverters are manufactured, play a key role in guaranteeing consistent quality and in providing assurance of supply to the market.

Manufacturing sites:
2 in Italy, 1 in India

3

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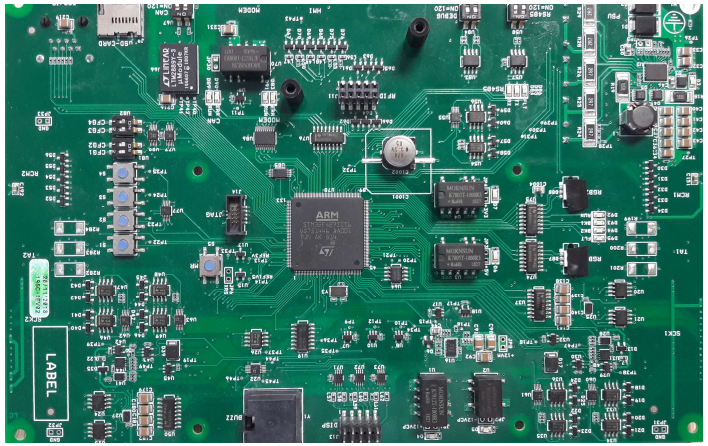
Fimer PCB - SMD lines

Our commitment to engineering excellence as well as rigorous quality and testing standards are underpinned by our global certifications and we endeavor to achieve the highest quality standards across every aspect of our business.



PCB lines:
2 in Vimercate, 7 in Valdarno

9

FIMER

FIMER
e-mobility division

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E-mobility segments where we play

We are shaking up the future of mobility as we move towards a new electric era

For a supercharged electric mobility

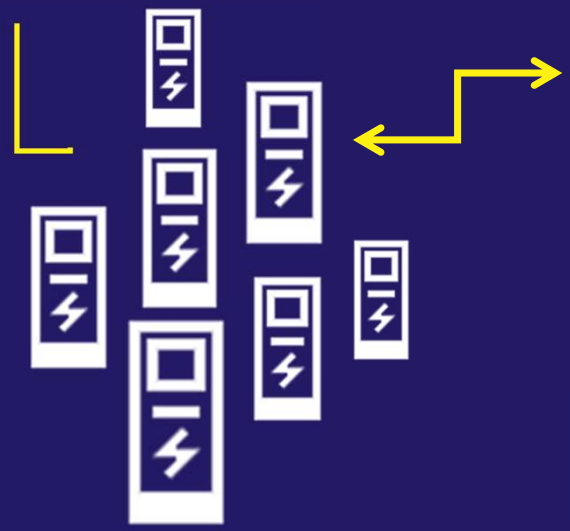
FIMER's role in the EVI sector

Active in e-Mobility since 2017

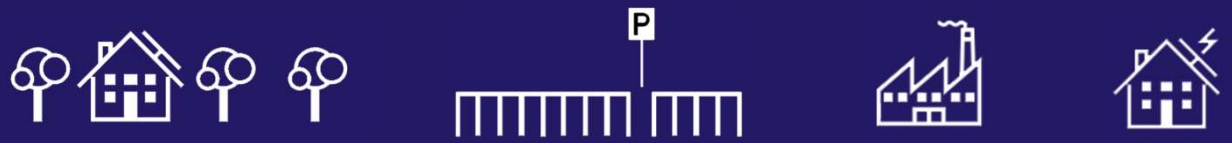
For a supercharged electric mobility

Since 2017

25.000 stations produced



UTILITIES - EVI PRODUCERS - EVI COMPETITORS - CAR PRODUCERS



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FIMER enters the New Era of e-mobility

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FIMER EVI product lines

FIMER FLEXA

AC

AC Wallbox

AC Station

FIMER ELECTRA

DC

DC Station

DC Wallbox

FIMER EVI products portfolio

FIMER FLEXA
AC Wallbox
3,7 - 7,4
11 - 22 kW

FIMER FLEXA
AC Station
2 x 22 kW
1 x 3,7 kW + 1 x 22 kW

FIMER ELECTRA
DC Station
60 kW - 90 kW
120 kW - 150 kW

FIMER ELECTRA
DC Wallbox
25 kW

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FIMER FLEXA
AC Wallbox

The FIMER FLEXA AC Wallbox is a wall-mounted charging device for electric vehicles. It is specifically designed for residential or commercial applications in accordance with safety, efficiency and user-friendliness.

- **Charging mode: 3**

- Optional Mid Meter
- Electromechanical protections not included. They can be externally added, if wall mounted, or included in the Stand support accessory, if purchased together.
- In case of versions with <2,3kW setting, protections are not necessary.

Socket T2

Cord T2

Socket T3A

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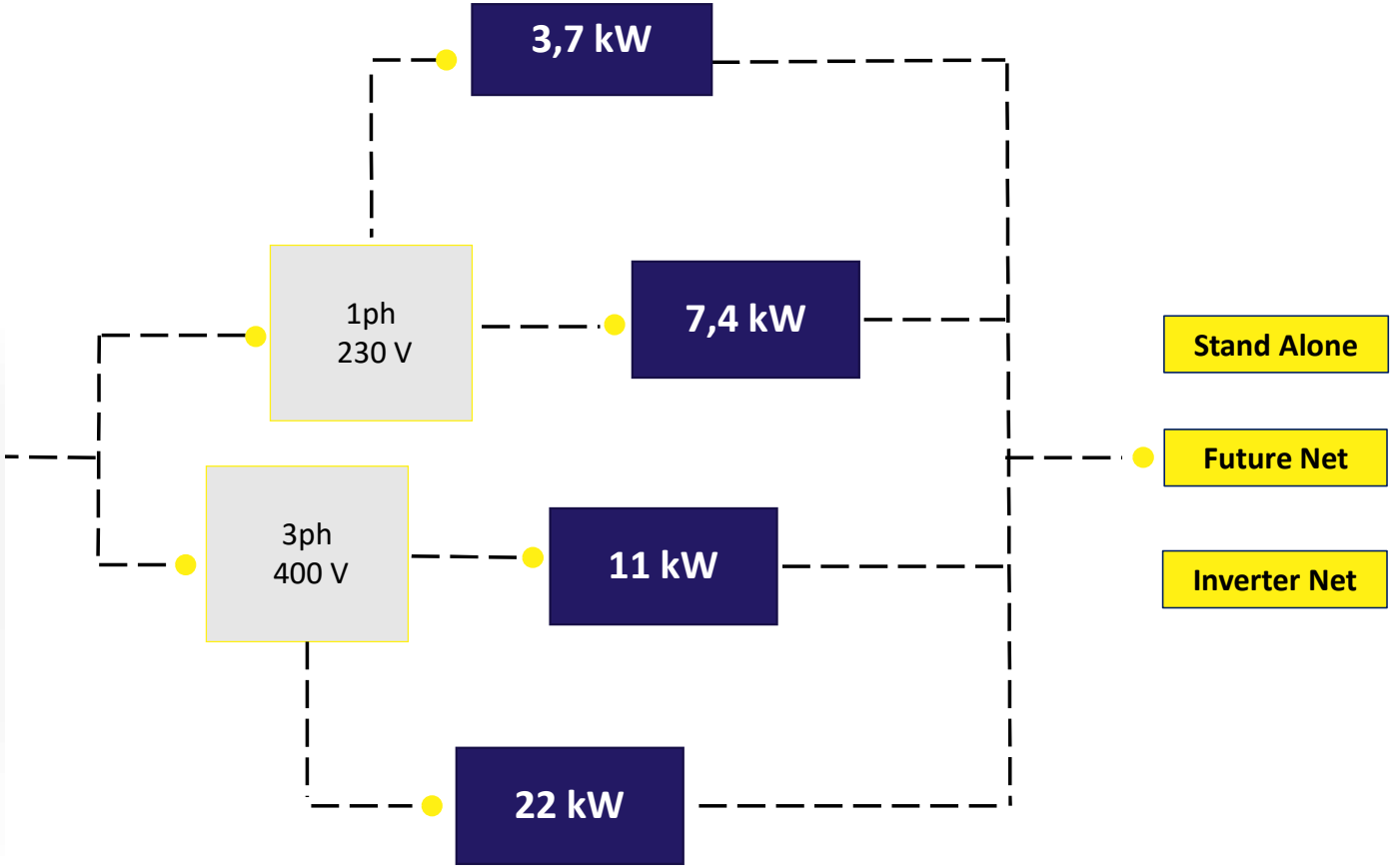
FIMER FLEXA AC Wallbox
Cord & socket versions



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FIMER FLEXA AC Wallbox
Connectivity versions

Stand Alone

PLUG IN
RFiD (local)
BLE (optional)

Future Net

RFiD
Wi-Fi
BLE (optional)
Ethernet
OCPP 1.6 J
Master slave
Load manager

Inverter Net

RFiD
Wi-Fi
BLE (optional)
Ethernet
OCPP 1.6 J
Solar inverter Integration (REACT 2)

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FIMER FLEXA AC Wallbox
Product information

- Multi-configuration: Master/Slave – Load Manager
- Charging mode: Socket T2–Socket T3A–Cord T2–GB/T
- Power output : 3,7 – 7,4 – 11 – 22 kW
- RFiD Reader (Local White List)
- Wi-Fi – BLE – Ethernet – OCPP 1.6
- Protection Level : IP55 and ANTITAMPER
- Easy to install and maintenance
- Private and Public installation (on wall and stand)
- Power Backup : SuperCap Manager

100% Recycled material

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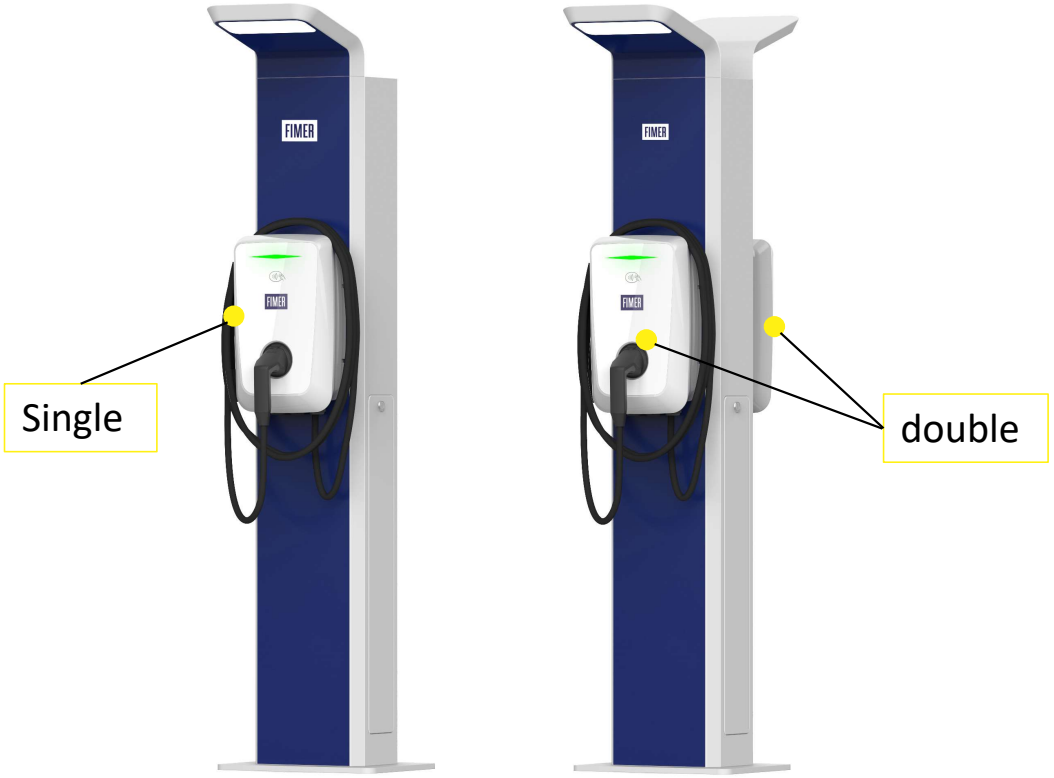
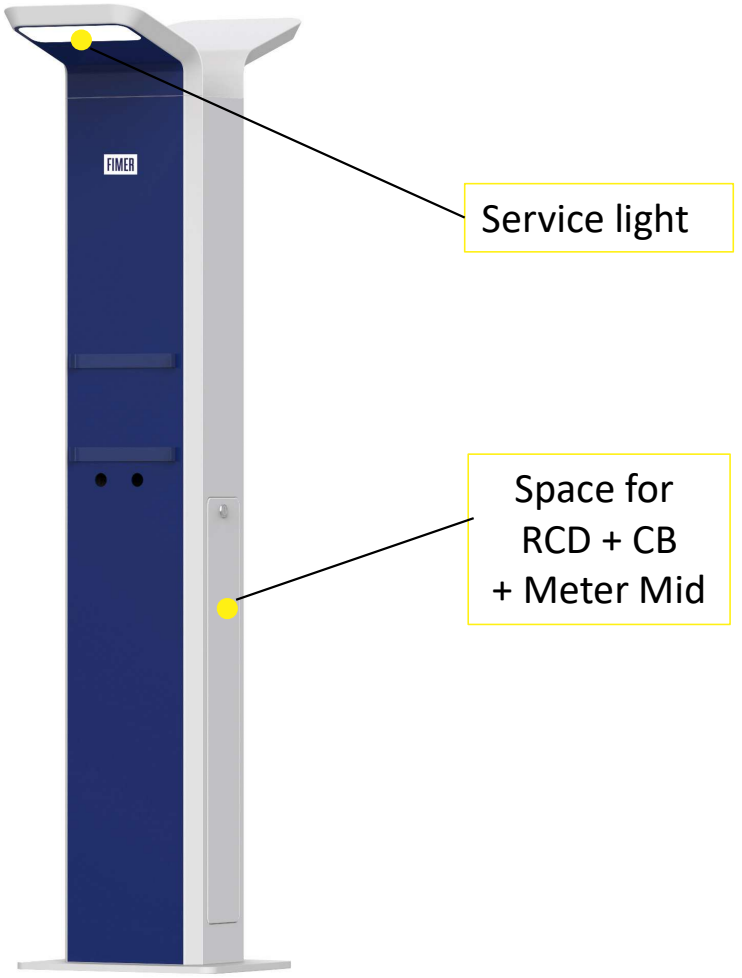
FIMER FLEXA Stand
AC wallbox accessory

The FIMER FLEXA Stand is a supporting structure suitable for any version of the FIMER FLEXA AC Wallbox and for any positioning need.
Available in both single-charging-point mode and double-charging-point mode, it is equipped with dedicated LED lighting to highlight the charging point.

FIMER FLEXA Stand
AC wallbox accessory





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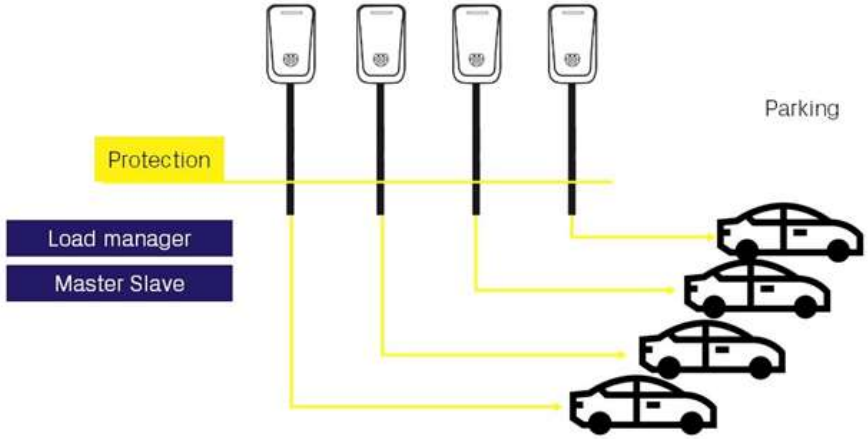
FIMER FLEXA Stand
AC wallbox accessory

Stand support, suitable for all the wallbox versions

- Single-charging-point
- Double-charging- point mode.
- Integrated solution to house the electromechanical protections.
- **Master Slave**
- **Load management**
- Ground fixing
- Prepared to allow the internal passage of connection cables
- IK 08
- Approx. dimensions : 40x40x200cm – 17 kg



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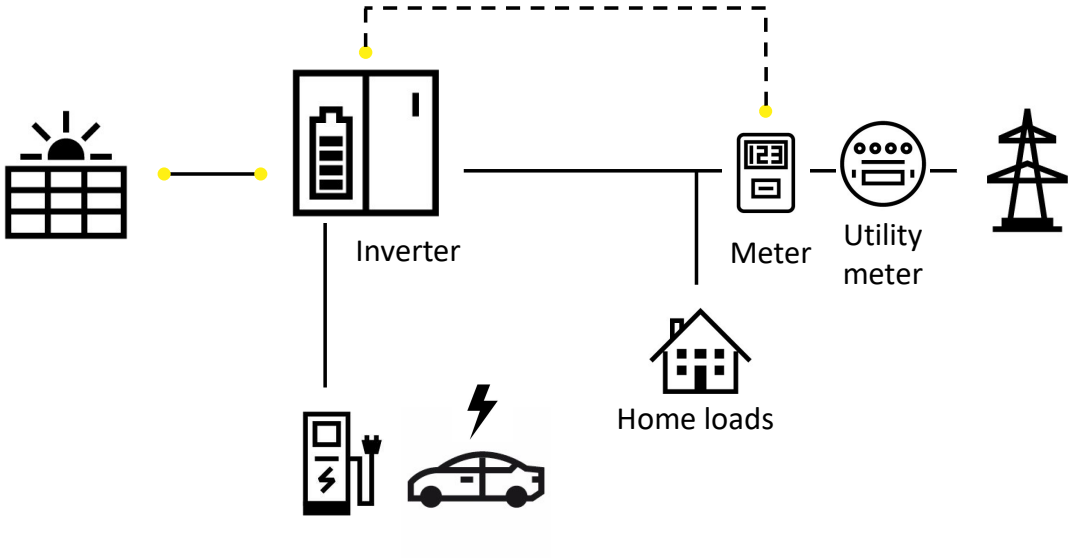
FIMER FLEXA AC Wallbox
Interaction with solar inverter



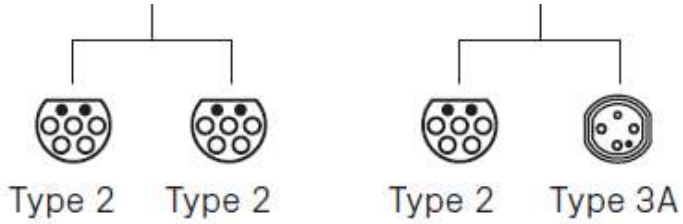
One of the most important goal is the development of systems connecting solar inverters and e-mobility charging stations, offering complete interactions and solutions.

FIMER FLEXA
AC Station

The FIMER FLEXA AC Station line design is based on solidity and functionality, in compliance with the international standard **IEC 61851-1**.

The FIMER FLEXA is a charging station able to recharge up to two electric vehicles in alternating current, each up to **22kW.**

Charging mode 3 – **case B** . The product is equipped with two type 2 sockets. Type 3A available on request.



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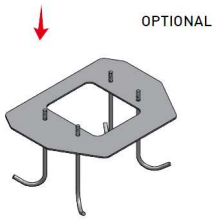
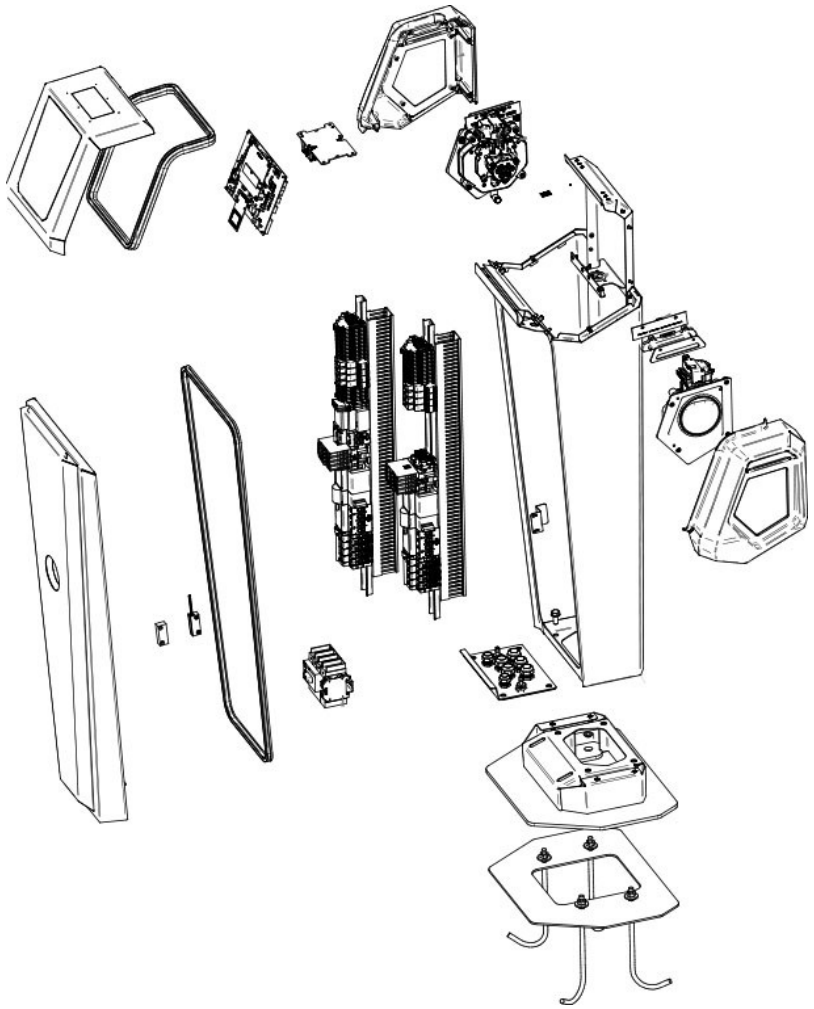
Solid construction

- Full metal stainless steel exterior
- IK10 degree of mechanical strength at impact tests
- Strongly fixed to the ground
- External color provided with powder coating
- Optional base plate accessory available





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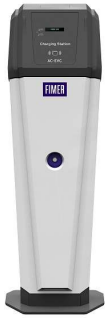
FIMER FLEXA AC Station
The range

FIMER FLEXA
Stand Alone

Plug & Charge solution - no special functions, the charger simply provides current anytime a cable gets connected



FIMER FLEXA
Local Controller

RFiD - the charger authorizes only users identified with a RFiD badge, can be locally programmed.

FIMER FLEXA
Future Net

OCPP connected, with all smart functions and ready to communicate with a service provider (mobile app)

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FIMER FLEXA AC Station
Product information

- Multi-configuration:Master/Slave–Load Manager
- Charging mode: Socket T2 – Socket T3A
- Power output : 3,7 to 22 kW AC
- RFiD Reader (Local White List)
- Wi-Fi – BLE – Ethernet - OCPP
- Protection Level : IP54 and IK10
- Easy to install and maintenance
- Public installation and customization
- Power Backup : SuperCap Manager

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Safety

- Automatic retention of the cable during charging

- Welding detection and intervention
- Diagnostic systems and internal coordination of protections.
- Measurement of all internal tensions
- Monitoring of internal temperatures
- Monitoring of the status of the contactor and of the circuit-breaker
- Ground fault reclosure system
- Monitoring of electromechanical component status

- Leakage detect protection through Residual Current Device type B (or Type A + RCM)

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FIMER ELECTRA DC Station
Product information

The FIMER ELECTRA DC Station main features:

- Modular architecture ensuring high flexibility and different power configurations (60 kW – 90 kW – 120 kW – 150 kW)
- 3 simultaneous charging sessions (2 DC + 1 AC)
- Output 500V (cars) and 1000V (Bus/trucks)
- Dynamic load power distribution
- ISO 15118
- IP54
- 96% power efficiency for energy-saving

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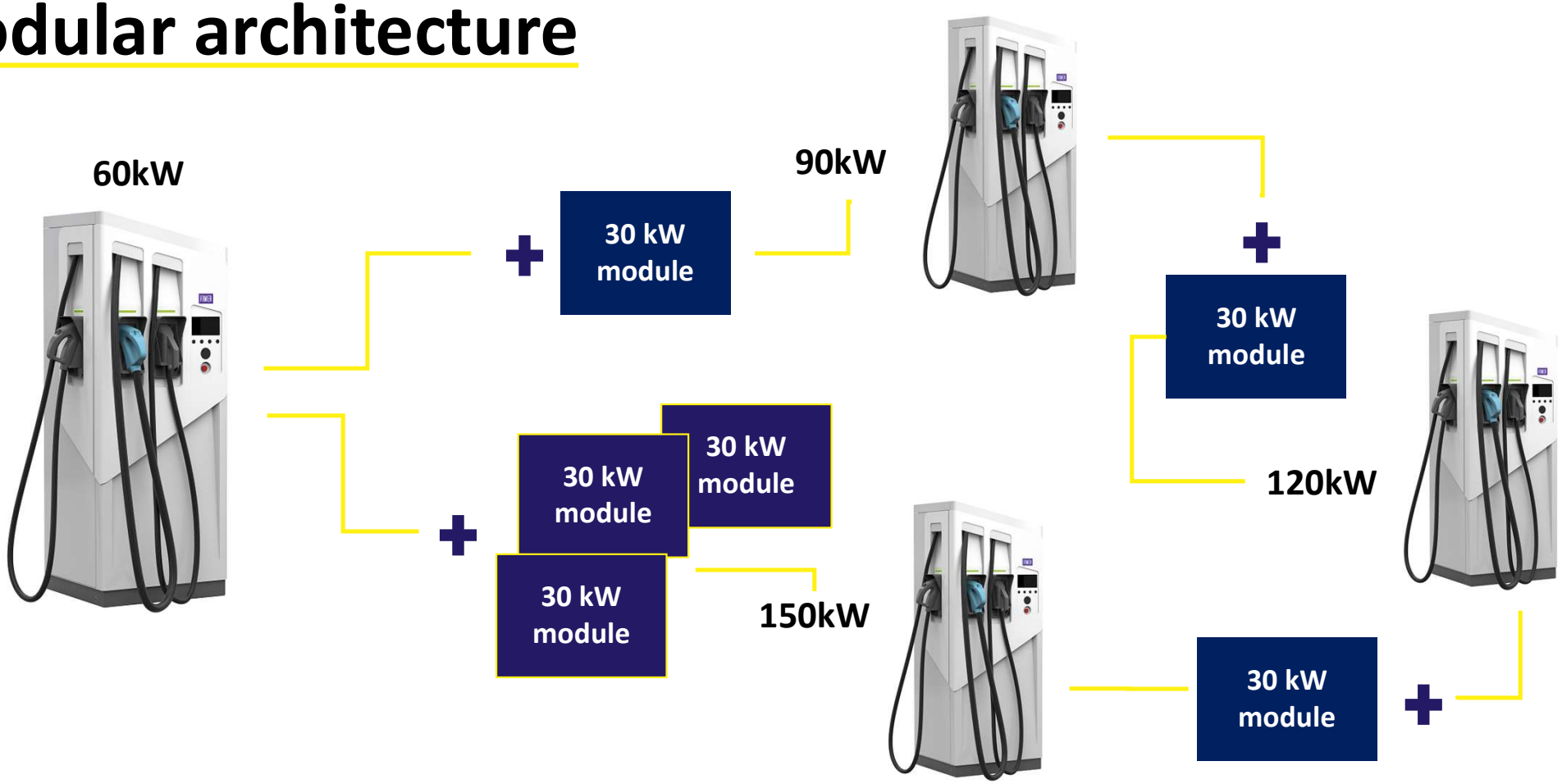
FIMER ELECTRA DC station
Modular architecture



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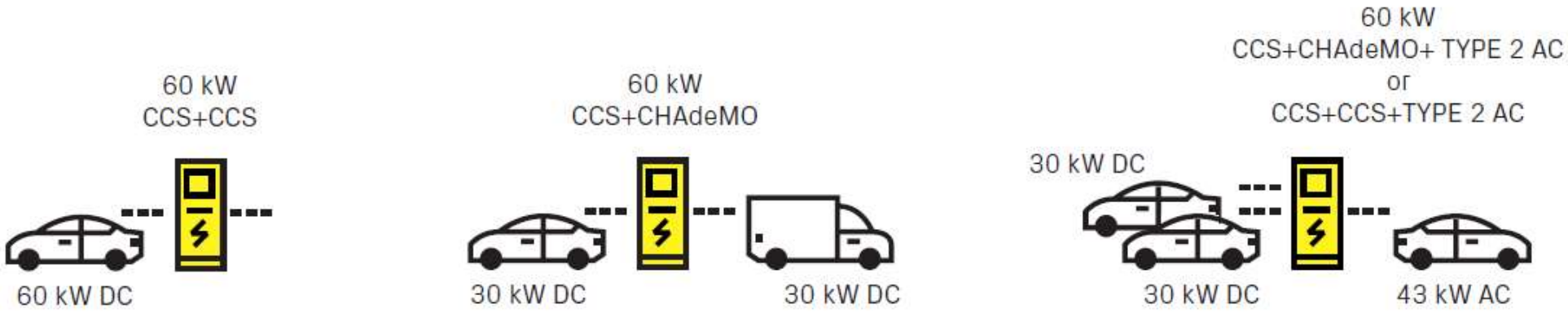
FIMER ELECTRA DC station
Example of charging options



In case two vehicles are charging and one of them concludes, the kW no more in use returns immediately available to the other vehicle with a **instant switching** of power.
The example refers to a charging station with a maximum power of 60kw. As the power modules increase, the kW available for simultaneous chargings will obviously increase, too.

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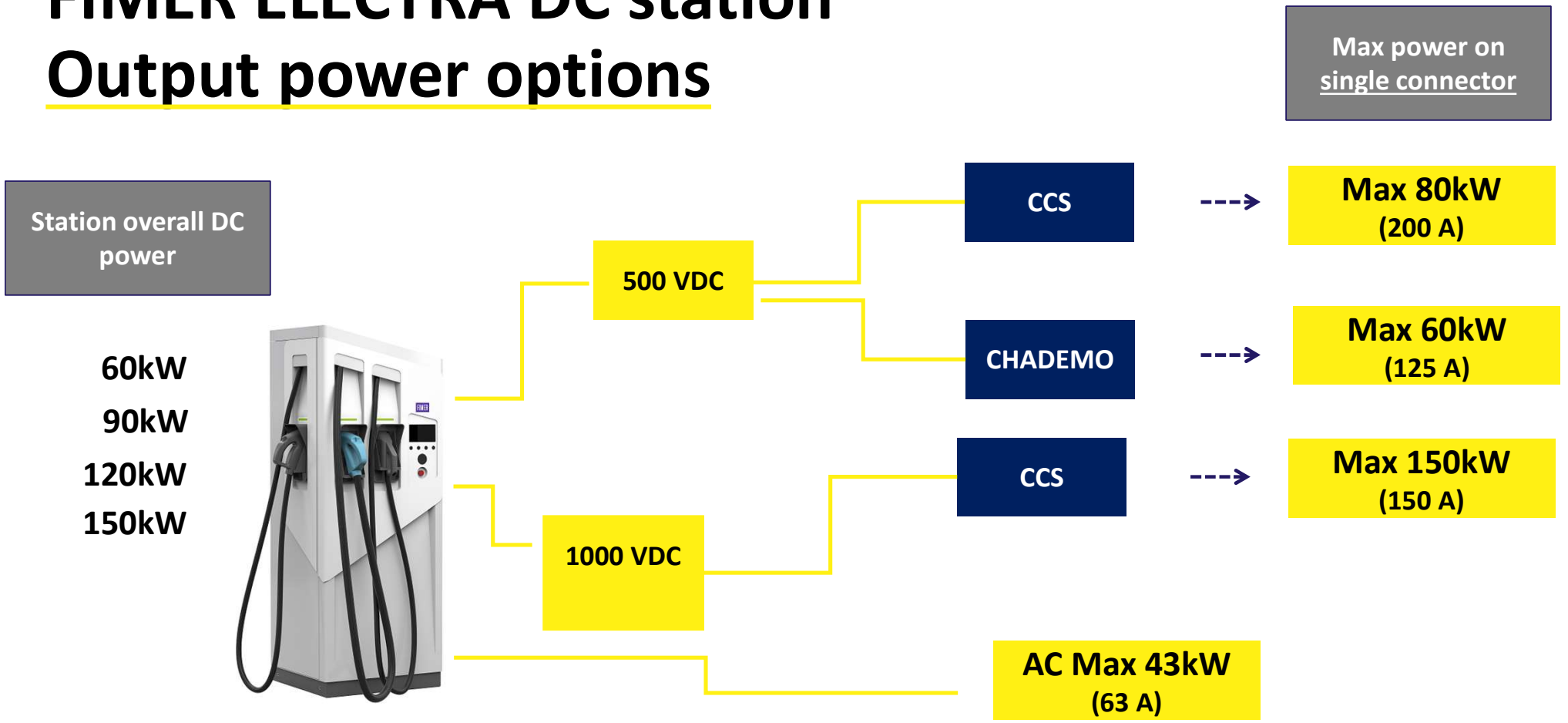
FIMER ELECTRA DC station
Output power options



* AC Socket T2 43 kW always available

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FIMER ELECTRA DC Station
Product information

- Simultaneous and Dynamic Management DC Power
- Charging mode: CCS - CHADEMO - TYPE 2 - GB/T
- Power output : 60 to 150 kW DC – 43 kW AC
- RFiD Reader and Emergency Button
- Wi-Fi – BLE – Ethernet – OCPP 1.6 Json
- Protection Level : IP54 and IK10
- Easy to install other power module (30 kW each)
- Public installation and customization
- Power Backup : UPS

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FIMER ELECTRA DC Wallbox
Product information

- FIMER ELECTRA DC Wallbox is a wall-mounted charging device for electric vehicles allowing a very powerful DC charging. It is specifically designed for residential or commercial applications in accordance with safety, efficiency and user-friendliness.

- Bidirectional (V2G)

- Modular & customizable connectors :
  - 1 x CCS
  - 1 x CHADEMO
  - 1 CCS + 1 CHADEMO

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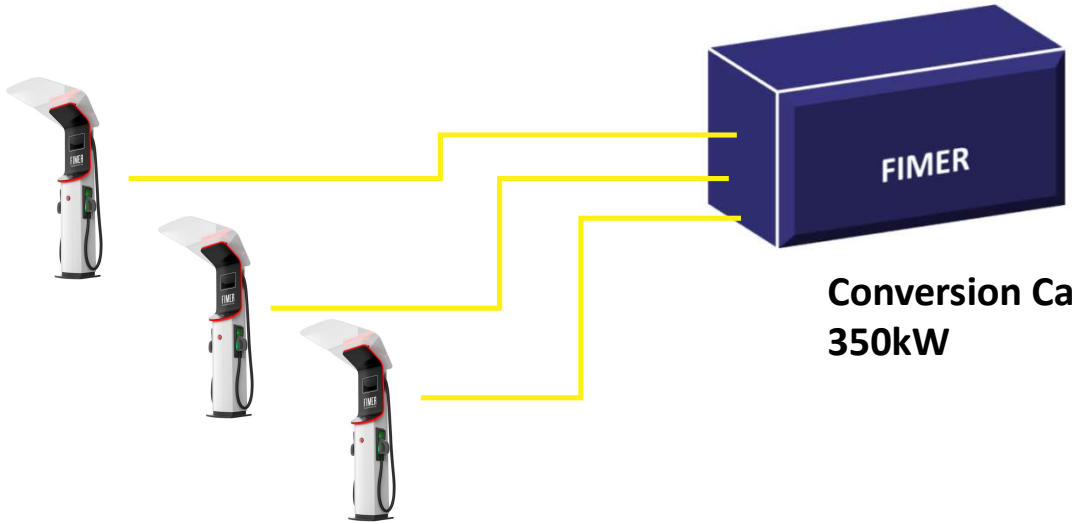
FIMER – Next developments

®

FIMER HYPERFAST

Ultrafast DC charger up to 350 kW

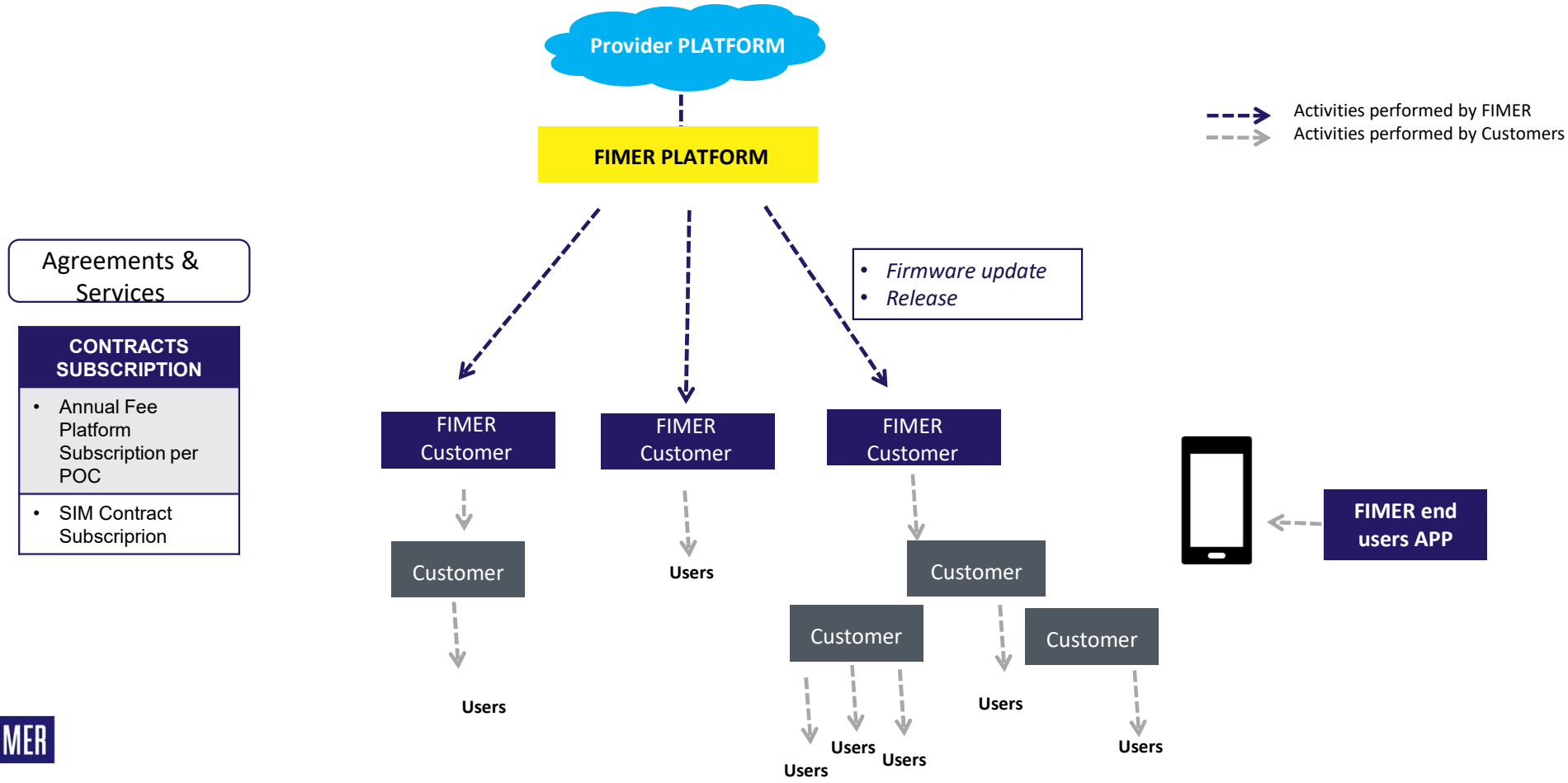
- Separate cabinet for conversion connected to more dispensers (75kw modules)



Conversion Cabin 350kW

Next developments

FIMER Platform to manage FIMER chargers connectivity and services



So are you ready?

Progress only happens when you're pushing the boundaries.

We offer our partners and customers a bold combination of flexibility and experience. And our advanced solar and **EVI solutions** help you push the limits of what's possible.

We're focused. On investment. R&D. Service experience.
And like you, we're growing all the time. We're taking smart, green energy to the next level.

Together, let's step into a New Era of e-mobility

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Have a good charge!
FIMER

Thank you

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